



FOM Development Toolkit

TASC

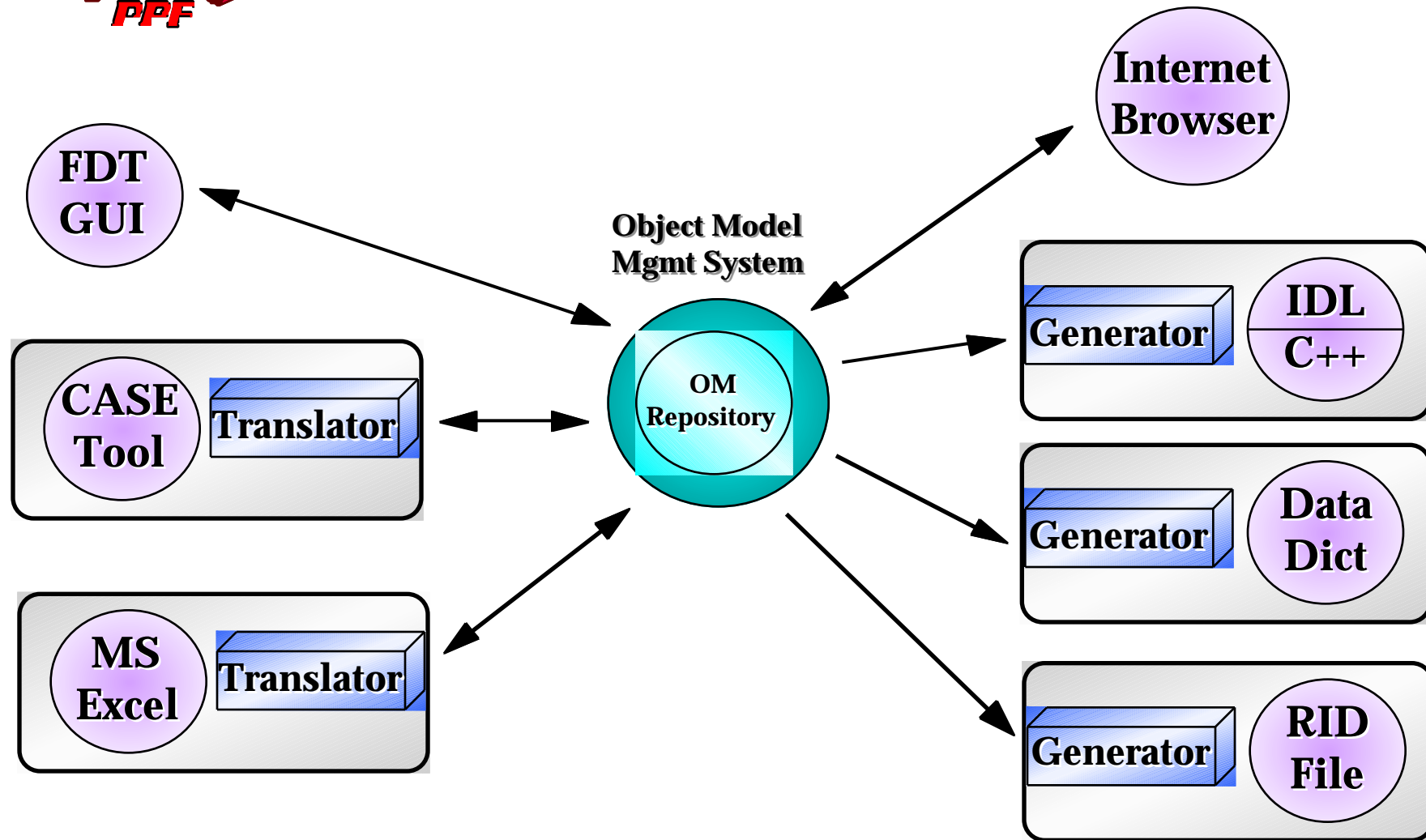
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FDT Architecture





FDT Components

❖ **Object Model Management System (OMMS)**

— Purpose

- ◆ Provide access to FOM/SOM repositories
- ◆ Manage creation, deletion, and modification of individual FOMs and SOMs

— Features

- ◆ Support change propagation of modified object model elements - ensure internal consistency
- ◆ Support versioning of FOMs and SOMs
- ◆ Uses industry standard API (CORBA IDL) to provide language and platform independence



FDT Components

- ◆ Maximizes reuse and protects tool investment by isolating changes in OMMS implementation
- ◆ Future tools can take advantage of the services provided by the OMMS
- ◆ Distributed access - maximize resources and support changing environments
- ◆ Low cost - run-time licenses



FDT Components

❖ **JAVA Graphical User Interface**

— Purpose

- ◆ Automate FOM development process
- ◆ Access Object Model Repository to create and version FOMs and SOMs

— Features

- ◆ Build FOMs using graphical representations
- ◆ Navigate and query Object Model Repository
- ◆ FOM/SOM consistency is enforced
- ◆ Architecture neutral
 - Access using Macs, PCs, and Unix systems



FDT Components

- ◆ **WWW Internet Access**
 - Browse remote FOMs and SOMs from any platform (MAC, PC, Unix workstation) using JAVA-compliant Web browsers
 - FOM and FDT software distribution mechanism
- ◆ **Independent of methodology**
- ◆ **Scales well with larger systems**
- ◆ **Start and manage other FDT Tools**
 - Code Generator
 - RID Generator



FDT Components

❖ **IDL/C++ code generator**

— Purpose

- ◆ Using the OMMS, a graphical tool accesses the FOM and generates the necessary IDL structs
- ◆ The tool also generates additional C++ classes to enforce consistency between the FOM specification and the simulation implementation

❖ **RTI Initialization Data (RID) file generator**

— Purpose

- ◆ Using the OMMS, a graphical tool accesses the FOM and generates valid RID files to support RTI initialization